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REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 15 and 19 are currently being amended.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-20 are now pending in this application.

The Examiner rejected Claims 1-16 and 19-20 under 35 U.S.C. § 102(a) as being anticipated by Nicosia et al. (U.S. Published Application No. 2002/0147544). The Examiner indicated that Nicosia et al. discloses "directing a radar beam defined by a polygon (runway) which represents the runway and which is derived from the runway information (see FIG. 7, "known vectors" and "map matched scenes").

Applicant respectfully disagrees with the Examiner that Nicosia et al. teaches a limitation of directing a radar beam defined by a polygon which represents the runway and which is derived from the runway information, which is in some form or another in independent Claims 1, 7, and 15. What is taught by Nicosia et al. is that a radar system identifies the location of a runway by using a radar device and matching the location of landmarks stored in a database with radar returns in order to calculate the aircraft's actual position vector and velocity vector.

The APALS System takes pictures of the actual ground and compares the taken pictures to stored maps. Once it compares them to stored maps and finds the match point, the match point is immediately known in terms of its range and range rate at that point of time. As APALS progresses and measures its range and

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range rate relative to known points on the ground. Once it measures three different points, it can form a deterministic solution of where it is, and what direction it is heading and how fast it is going . . .

It repetitively gets the range and range rates on each side, and over time forms a very accurate solution iteratively to the equation that allows it to know its position vector and velocity vector." See, Nicosia et al., par. [0083]. Thus, it can be seen that the teachings of Nicosia et al. are for finding the location and velocity of the aircraft by using radar and correlating the radar with known locations. What Applicant claims in independent Claims 1, 7, and 15 is retrieving runway location information from a database, which is based on the location of the aircraft provided by a position sensor and directing a radar beam within the runway region identified by the database to identify obstacles on the runway. This is not taught by Nicosia et al.

Nicosia et al. utilizes radar returns in order to find its location relative to a runway. In order to provide "enhanced navigational capabilities by correlating stored scene information with echo analysis information derived from an active traveling wave device (ATWD) output representing information concerning the vehicle's state and velocity vectors with respect to a mapped scene." Nicosia et al., Abst. "The claimed invention is not anticipated under § 102 unless each and every element of the claimed invention is found in the prior art." *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 231 U.S.P.Q. 81, 90 (Fed. Cir. 1986). With respect to independent Claims 1, 7, and 15, Applicant respectfully submit that Nicosia et al. does not teach all the claim limitations, including, but not limited to directing the radar beam defined by a polygon which represents the runway and which is derived from the runway information.

The Examiner further states that in par. [0091] that Nicosia et al. discloses detecting runway obstacles. However, there is no structure or method given in Nicosia et al. to teach the detection of obstacles. "Rejection for anticipation or lack of novelty requires, as the first step in the inquiry, that all the elements of the claimed invention be described in a single reference (citations omitted). Further, the reference must describe the applicant's claimed invention sufficiently to have placed a person of ordinary skill in the field of the invention in possession of

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it." In re Spada, 15 U.S.P.Q.2d 1655, 1657 (Fed. Cir. 1990). Nicosia et al. does not place a person of ordinary skill in the field of the invention in possession of it, that is Nicosia et al. does not teach how obstacles on a runway would be detected using the system of Nicosia et al. Accordingly, Nicosia et al. does not anticipate independent Claims 1, 7, and 15. Therefore, Applicant respectfully submits that independent Claims 1, 7, and 15 and their respective dependent claims are therefore allowable.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 18-1722. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 18-1722.

Respectfully submitted,

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